Title (en)

ACCELERATION SENSOR

Title (de)

BESCHLEUNIGUNGSMESSER

Title (fr)

DETECTEUR D ACCELERATION

Publication

EP 1868000 B1 20111214 (EN)

Application

EP 05782315 A 20050908

Priority

- JP 2005016542 W 20050908
- JP 2005006783 W 20050406

Abstract (en)

[origin: EP1868000A1] An acceleration sensor 1 comprises a base 2 having an XY-substrate face which is parallel to an XY plane, a beam portion 4 in a frame shape which is arranged in a floating state above the XY-substrate face of the base 2, a beam-supporting fixed portion which supports the beam 4 to the base 2 via supporting units 5a and 5b like a beam supported by its both ends, weight portions 7 (7a, 7b) which are arranged so as to float above the XY-substrate face of the base 2, and connecting portions 8 which support the weight portions 7 (7a, 7b) to the beam portion 4 in a cantilever beam shape. The weight portions 7 are configured to be capable of displacement in the three-axis directions of the X-axis direction and the Y-axis direction and the Z-axis direction by the bending deformation of the frame-shaped beam portion 4. The beam portion 4 is provided with an X-axis direction acceleration detecting portion for detecting acceleration based on the bending deformation of the beam portion 4 originating from the displacement of the weight portion 7 which originates from acceleration in the X-axis direction, a Y-axis direction acceleration detecting portion based on the bending deformation of the beam portion 4 from the displacement of the weight portion 7 which originates from acceleration in the Y-axis direction, and a Z-axis direction acceleration detecting portion based on the bending deformation of the beam portion 4 from the displacement of the weight portion 7 which originates from acceleration in the Z-axis direction.

IPC 8 full level

G01P 15/00 (2006.01); **G01P 15/12** (2006.01); **G01P 15/18** (2013.01); **H01L 29/84** (2006.01)

CPC (source: EP KR US)

G01P 15/0802 (2013.01 - EP US); **G01P 15/09** (2013.01 - KR); **G01P 15/123** (2013.01 - EP US); **G01P 15/18** (2013.01 - EP US); G01P 2015/0831 (2013.01 - EP US); G01P 2015/0842 (2013.01 - EP US)

Cited by

EP2327960A4; US8156827B2; US8683864B2; US9500666B2; US10145686B2

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DOCDB simple family (publication)

EP 1868000 A1 20071219; **EP 1868000 A4 20101006**; **EP 1868000 B1 20111214**; AT E537457 T1 20111215; CN 100454022 C 20090121; CN 1981197 A 20070613; JP 3956999 B2 20070808; JP WO2006112051 A1 20081127; KR 100867550 B1 20081110; KR 20070067073 A 20070627; US 2009183571 A1 20090723; US 7631559 B2 20091215; WO 2006112051 A1 20061026; WO 2006114832 A1 20061102

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